



2079 Center Square Road
 Logan Township, NJ 08085
 Phone: 856-467-3030

TECHNICAL DATA AND PROCESS SHEET

20% GLASS FIBER REINFORCED NYLON 6

INSTRUC PA6GF20

TYPICAL PROPERTIES

PROPERTY	ASTM METHOD	English	UNITS	Metric SI	UNITS
GENERAL					
SPECIFIC GRAVITY	D792	1.27		1.27	
SPECIFIC VOLUME		21.81	in ³ /lb	0.787	cm ³ /gm
WATER ABSORPTION (24 Hrs)	D570	1.3	%	1.30	%
MOLD SHRINKAGE	D955	0.4-0.5	%	0.4-0.5	%
MECHANICAL					
TENSILE STRENGTH	D638	19,000	psi	131	MPa
ELONGATION, YIELD	D638	3-4	%	3-4	%
FLEXURAL STRENGTH	D790	28,000	psi	193	MPa
FLEXURAL MODULUS	D790	900,000	psi	6,205	MPa
SHEAR STRENGTH	D732	10,000	psi	69	MPa
IZOD IMPACT STRENGTH	D256				
NOTCHED 1/8"		1.2	ft.lb./in.	64	J/m
UNNOTCHED 1/8"		10	ft.lb./in.	533	J/m
ROCKWELL HARDNESS					
THERMAL					
HDTUL @ 264 PSI	D648	410	°F	210	°C
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	2.2	in./in. F x10 ⁻⁵	3.96	mm/mm C 10 ⁻⁶
FLAMMABILITY ¹	U.L.Subj 94	HB@1/16	in	HB@ 1.5	mm
ELECTRICAL					
SURFACE RESISTIVITY		10e ¹⁶	ohms/sq	10e ¹⁶	ohms/sq
PROCESSING					
DRYING TEMPERATURE		175	°F	79	°C
DRYING TIME		4	hrs	4	hrs
MELT TEMPERATURE		480-550	°F	250 - 290	°C
MOLD TEMPERATURE		200	°F	93	°C
BACK PRESSURE		50-100	psi	0.3 - 0.7	MPa
SCREW SPEED		40-70	rpm	40-70	rpm
VENT DEPTH		0.0005-0.001	in	0.0125 - 0.025	mm

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